

SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Jim Doyle, Governor Aaron Olver, Secretary

September 29, 2010

WISCONSIN WATER TREATMENT CORP DONALD D. QUADE 3079 E. LK. GEO. RD RHINELANDER WI 54501

Re: Description: WATER TREATMENT DEVICE- SOFTENER Manufacturer: WISCONSIN WATER TREATMENT CORP

Product Name: IRON FILTER (POE)

Model Number(s): 5654 (POE) Product File No: 20100267

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of September 2015.

This approval supersedes the approval issued on November 14, 2005 under product file number 20050299.

This approval is contingent upon compliance with the following stipulation(s):

- > This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- ➤ Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- ➤ If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- > These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater volumes, total dissolved solids and chloride discharges are minimized.
- > The department does not recommend the use of water softeners for reducing dissolved iron concentrations in excess of 3.0 mg/l. This is because applying water softeners in this way sacrifices long-term water softener performance and efficiency. The use of water softeners for reducing dissolved iron concentrations exceeding 3.0 mg/l also generates excessive, and otherwise avoidable, quantities of chloride and dissolved solids which are subsequently discharged to ground and/or surface water supplies. Once present in ground and/or surface water supplies, chloride and dissolved solids tend to remain in the water resource and may travel great distances from the original point source. Presently, there are no economically viable methods to remove chloride and dissolved solids from water supplies because available technologies generate waste streams of their own, further concentrating the problem. It has been established by the Wisconsin Department of Natural Resources that chloride is chronically toxic to representative aquatic organisms, including forage and sport fish, at 395 mg/l, and acutely toxic at 757 mg/l.

SBD-10564-E (N.10/97) File Ref: 10026701.DOC

Wisconsin Water Treatment Corporation September 29, 2010 Page 2 of 2

Product File No.: 20100267

Based on testing data submitted to and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

AESTHETIC CONTAMINANT REDUCTION CAPABILITIES PRODUCT FILE NUMBER 20100267 TABLE 1 OF 1

Flow rate: 7.6 liters per minute (lpm) [2.0 gallons per minute (gpm)]

Capacity: 2,271 liters (I) at a 4.5 kilogram (Kg) salt dosage [600 gallons at a 10.0 pound (lb.) salt dosage]

Tested Contaminant	Influent Challenge (mg/l)*,1
Dissolved iron (Fe ⁺²)	6.0
pH (low)	6.5 pH units

Other conditions: the contaminant reduction performance capabilities displayed in Table 1 of 1 were verified by testing conducted by Wisconsin Water Treatment Corp. on naturally occurring well water in Rhinelander WI. The dissolved iron concentration was reduced to an average of 0.13 mg/l and the pH was increased to an average of 7.1 pH units.

- * = unless otherwise indicated
- 1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
Bureau of Integrated Services
Safety and Buildings Division
Department of Commerce
(608) 267-1401 Phone
(608) 267-9566 Fax
glen.schlueter@wi.gov Email
8:00AM – 4:30PM CT Work Hours

GWS:gws